DMS - 6350
LIME AND LIME SLURRY

EFFECTIVE DATE: OCTOBER 2014

6350.1. Description. This Specification establishes requirements and test methods for hydrated lime, commercial lime slurry, carbide lime slurry, and quicklime.

6350.2. Units of Measurements. The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

6350.3. Definitions.

A. Hydrated Lime—Hydrated Lime is a dry powdered material consisting of calcium hydroxide.

B. Commercial Lime Slurry. Commercial Lime Slurry is a liquid mixture of hydrated lime solids and water delivered to a project in slurry form.

C. Carbide Lime Slurry. Carbide Lime Slurry is a hydrated lime slurry produced as a by-product of the generation of acetylene, and delivered to a project in slurry form. Carbide lime slurry must meet the non-hazardous recyclable material requirements in DMS-11000.

D. Quicklime. Quicklime is a dry material consisting of calcium oxide. Quicklime may be furnished in either of two grades:

- Grade DS is a grade of "pebble" quicklime suitable for either dry placing or for use in the preparation of slurry for wet placing.
- Grade S is finely graded quicklime for use only in the preparation of slurry for wet placing.

Note—Apply lime as noted in the governing specifications.

6350.4. Quality Monitoring Program. DMS-6330 governs the Lime Quality Monitoring Program (LQMP) pre-qualification requests, pre-qualification requirements, quality monitoring requirements, disqualification, re-qualification, and sampling of lime sources. Only products in the LQMP will be allowed on Department projects.

6350.5. Material Producer List. The Materials & Pavements Section of the Construction Division (CST/M&P) maintains a material producer list of products conforming to the procedures and requirements of the LQMP. Materials are listed on the MPL entitled "Lime."

6350.6. Sampling and Testing. Sample and test lime in accordance with Tex-600-J.

6350.7. Material Requirements.

A. Chemical Requirements.

Table 1

Chemical Requirements

	Hydrated Lime	Commercial Lime Slurry	Quicklime	Carbide Lime Slurry
Total "active" lime content, % by wt.	90.0 Min	87.0 Min		87.0 Min.
Unhydrated lime content, % by wt. CaO	5.0 Max		87.0 Min.	
"Free Water" content, % by wt. H_2O	5.0 Max			

B. Physical Requirements.

Table 2

Physical Requirements

	Hydrated Lime	Commercial Lime Slurry	Quicklime	Carbide Lime Slurry
Wet Sieve Requirement, As % by Weight Residue:				
Retained on No. 6 sieve	0.2 Max.	0.2 Max.	8.0 Max[1]	0.2 Max.
Retained on No. 30 sieve	4.0 Max.	4.0 Max.		4.0 Max.
Dry Sieve Requirement, As % by Weight Residue				
Retained on a 1-in. sieve			0.0	
Retained on a 3/4-in. sieve			10.0 Max.	
Retained on a No. 100 sieve			Grade DS – 80% Min. Grade S – no limits	
Retained on No. 6 sieve	0.2 Max.		8.0 Max.[1]	

1. The amount of total "active" lime content, as CaO, in the material retained on the No. 6 sieve must not exceed 2.0% by weight of the original quicklime.

6350.8. Archived Versions. Archived versions are available.